Proposed Template Applied to Option 1:
Regional Transmission Problems and Opportunities

Summary

- Option 1 uses a coordination contract approach, with minimal formation of new entities. Option 1 will rely on the Northwest Transmission Assessment Committee (NTAC) for regional planning, the existing Pacific Northwest Security Coordinator (PNSC) for reliability, a new regional NW-OASIS for access, cooperation with a Northwestern market monitor, and formation of an oversight committee of signatories to the TCC for governance.
- Changes will be based to the greatest extent possible on contracts, rather than by creating new institutions or new entities. The TCC will enable more specific activities and bind signatories to obligations and responsibilities. Any participant in the wholesale market could be a signatory to the TCC. If necessary, the TCC will be enhanced by the creation of a new, small, and carefully circumscribed entity to carry out responsibilities.
- NTAC will be responsible for all regional planning studies, including those associated with requests for new long-term transmission service. NTAC will be an open, stakeholder-driven process that will evaluate both "wires" and "non-wires" solutions to improve both reliability and efficiency. Transmission expansion will be achieved mainly through an "open season" process, with the funding entity receiving life-of-facility PTP or capacity ownership rights.
- The regional NW-OASIS will handle all requests for transmission access, both short-term and long-term. NW-OASIS will calculate ATC; if studies are required, NW-OASIS will hand the request to NTAC. NW-OASIS will also perform feasibility tests and limit schedules up until real-time, when the PNSC will take over. NW-OASIS will implement uniform rate discounting to maximize use of short-term ATC.
- Congestion will be managed by a combination of schedule limits and gradually increasing reliance on market forces. Transmission owners' obligations under tariff in the event of curtailments will be clarified.
- Ancillary services will continue to be provided through bilateral markets and the obligation to offer by transmission providers.
- Market monitoring is assumed to result from agreement between state and federal regulators to form a Northwest market monitor. Entities operating under Option 1 will cooperate with the market monitor.
- Transmission costs will be largely recovered as they are today: through open-access transmission tariffs and related rate schedules.
- Identified changes would be phased in over the next two years; further improvements would be made if cost-effective. Improvements will be made on an incremental or phased basis, using analytical tools to determine the costs and benefits of each change so that net benefits to consumers are maximized.
- Some of the goals of Option 1 are: seamless transactions, quick turnaround on applications for service, transparency of operations, improved reliability, and continuing improvements over time if cost-effective.
- No end-state will be defined up front, but Option 1 would evolve into other forms if clearly necessary to solve regional transmission problems in a cost-effective manner.
- Improvements will minimize and, if possible, avoid exposure to new forms of regulation by FERC.

- Option 1 is intended to accommodate public power, IOUs, Canadian entities, and BPA in single framework, minimizing the number of legal issues raised.
- Option 1 is not a "status quo" approach, but recognizes that certain problems associated with the Northwest transmission grid need to be addressed and resolved.

Group 1 – Planning and Expansion

1.a Internal Planning

The Northwest Transmission Assessment Committee (NTAC) will issue an annual assessment plan, which will evaluate wires and non-wires options and determine regional cost/benefit ratio for all such projects. NTAC will conduct all studies to meet TOU obligations under existing tariffs to respond to new requests for service (system impact and facilities studies). Parties to the TCC will agree on modeling methods, assumptions, standards and processes to ensure broad acceptance of the planning results. Some load interconnection requests will go to NTAC for evaluation, depending on impacts on the regional system, but interconnection requests will continue to be evaluated by TOUs under FERC interconnection standards for FERC-jurisdictional utilities. NTAC will group service requests for efficient evaluation and may hire staff or contractors to meet performance standards. If NTAC and a TOU disagree about system impact studies, the study could be taken to binding arbitration (or some other formalized technical dispute resolution process) for technical accuracy. NTAC is expected to develop procedures for timely decision-making and dispute resolution, including stakeholder involvement.

1.b West-wide Planning

NTAC will coordinate annual studies with the rest of the WECC. If a service request crosses a seam between the Northwest and the rest of the WECC, NTAC will coordinate studies with other ISOs or RTOs.

1.c System Expansion

TOUs will have an opportunity to build both reliability and efficiency (load growth, integrating new generation, congestion management) projects that result from NTAC's plan. If a specific TOU does not want to build a project in the NTAC plan on its system, the TOU will conduct an open season on the project; this obligation will also apply to projects required for expansions related to service requests. (Eventually, NTAC will take over responsibility for all studies required in response to requests for service.) Open seasons will be run by TOUs or contracted out, with dispute resolution. TOUs will have a right of first refusal to build at the lowest qualifying bid. (The possibility that this might undermine interest in bidding by third parties must be addressed.) The entity paying for any upgrade will get life-of-facility PTP or capacity ownership rights. Expansion can also occur through specific requests for service. If projects in NTAC's assessment are not built even after an open season, signatories to the TCC will determine whether a cost allocation mechanism for new projects should be negotiated. Eventually, if needed and agreed by the signatories to the TCC, NTAC may establish a process to allocate system expansion costs and capabilities between reliability/adequacy projects and efficiency/commercial sufficiency projects.

Group 2 – Use of Existing System

2.a Short-Term Access

All requests for service will go through a single NW-OASIS, which will calculate ATC using flow-based analysis based on assumptions that are consistent with contractual obligations. NW-OASIS will have all necessary information from all market participants on TTC and other inputs to calculate OTC and ATC. Network models will be the same as those used by the PNSC for reliability analyses. New products will be offered through NW-OASIS on all TOU systems (e.g., firm redirects, long-term partial service, conditional firm service). Other new services could be developed over time through TCC (TOUs will have an obligation to cooperate in this effort). Centralized calculation and release of ATC should increase visibility and use of existing transmission capacity.

2.b ATC Calculation

BPA's current ATC process will form the basis for a regional ATC methodology, but will be modified to be more transparent and to protect existing transmission rights. The resulting methodology will be posted, and NW-OASIS will use this methodology as the basis for future work on developing a flow-based method for calculating ATC. NW-OASIS will use generation shift factors and flow distribution factors to limit schedules within operating limits and contract rights.

2.c Scheduling

NW-OASIS will eliminate transactional pancaking. NW-OASIS will establish schedule limits and communicate them to TOUs for implementation; the PNSC will determine feasibility of the results.

2.d Congestion Management & System Control

Schedule limits will be combined with increasing reliance on voluntary, decentralized markets, implemented via real-time retail pricing and demand exchange programs, bulletin boards for INCs and DECs, posting of surplus transmission for sale on NW-OASIS, and development of local price indexes. Posting of INCs and DECs and local price indexes could eventually lead to auctions. Costs of congestion management will be settled between market participants and transmission providers based on contract rights; the obligation of TOUs to provide firm service will be clarified, so that "overselling" of transmission capacity does not occur. NW-OASIS will set preschedule limits (with *pro rata* curtailments) to deal with parallel path effects, depending on power flow analyses. This is a limited shift from current contract rights to a combination of contract path and flow-based rights. The PNSC will have the authority to curtail physical schedules in real-time; however, NW-OASIS will establish a method for settling congestion costs post-curtailment.

TOUs will have an obligation to construct adequate transmission facilities to support their contractual obligations. Congestion costs incurred by customers (e.g., redispatch) will be reimbursed by TOUs when their system facilities are unable to provide service that is consistent with their contractual obligations. This approach should help ensure that TOUs have sufficient incentive to expand their facilities to support their contractual obligations.

2.e Transmission Rights

This option implements existing and future transmission contract rights based on the existing OATT model. Regional OATTs will have to change to incorporate features of this option.

Group 3 – Long-Term Access

3.a Physical Interconnection

All formal requests for interconnection will go to the TOUs. Informal discussions between new generators and TOUs should precede formal requests. FERC or local jurisdiction standard for interconnection requests will apply.

3.b Business Relationship

Requests for transmission service will be posted on NW-OASIS, which will either grant the request based on ATC or send it to NTAC for all necessary studies. Existing OATTs will be amended to shift responsibility for studies to NTAC. NTAC will investigate improvements to the queuing process, and will recommend conforming changes to transmission tariffs or business practices. If ATC exists, service will be provided at embedded cost. In addition, customers will be offered the choice of (a) obtaining the requested service at an unknown cost (depending on the outcome of needed studies) or (b) waiting for all studies to be completed before receiving an offer of service. NTAC will provide a dispute resolution process for technical challenges to the results of the system impact and facilities studies. Upon completion of system impact and facilities studies, and dispute resolution (if needed), the affected TOU will have an obligation to fulfill the service request ("commercially reasonable effort"). The "or" pricing test applies; if incremental cost exceeds embedded cost, the TOU can fund upgrades or require the requester to fund. Interconnection costs will be directly assigned.

Group 4 – Control Area Functions

4.a Short-Term Reliability

Existing control areas will retain the obligation to meet reliability criteria, and coordinate with WECC and NERC. Consolidation of control areas and changes in responsibility for control area functions will occur only on a voluntary basis. Markets in control area services will be encouraged through changes in tariffs and business practices associated with ancillary services. The PNSC will be able to order changes in generation or load in real-time by control areas to maintain reliability; NW-OASIS will determine post-curtailment compensation for cuts that are not *pro rata.* All market participants will provide complete preschedule, unit commitment and load forecast information to NW-OASIS for transmission system security assessment. NW-OASIS will determine the feasibility at preschedule (and post-preschedule up until real-time) and communicate the results to TOUs; if schedule adjustments are not made in response, transmission customers risk curtailments or orders by the PNSC to move generation in real-time. The division of liability between the control area operators and NW-OASIS must be determined.

4.b Ancillary Services (A/S)

This option relies on voluntary bilateral markets in A/S, supported by an obligation to offer certain A/S by transmission providers. Markets will be enhanced through changes in tariffs

and business practices to permit more third-party and self-supply. NW-OASIS will support markets by posting offers for the supply of A/S.

4.c Losses

In the near-term, this option relies on the continued use of average loss factors by each transmission provider. Over time, refinements of loss methodologies will reflect seasonal and diurnal loss factors, but this option uses average system losses, known in advance. Pancaked losses are a proxy for distance-based loss factors.

Group 5 – Cost Recovery

5.a Embedded Costs of Existing System

These costs will be recovered through existing tariffs and rate schedules.

5.b Rate Pancaking

In the short-term, NW-OASIS will implement uniform short-term rate discounting to maximize use of ATC. For paths with multiple owners, NW-OASIS will notify transmission customers of their payment obligations (i.e., assign resulting revenues among owners), but NW-OASIS will not issues bills or collect revenues from transmission service. Long-term service will continue to be subject to rate pancaking; however, if rate pancaking turns out to affect resource development in a way that increases costs to the region, or if mandated by state or federal law (e.g., a renewable portfolio standard), signatories to TCC would investigate shifting to the socialization of incremental costs of transmission.

Group 6 – Market Power

6.a Market Monitoring

This option assumes that a state/federal agreement on market monitoring will be implemented. However market monitoring is dealt with on a regional or west-wide basis, the NW-OASIS will supply information to the monitor. A Northwest market monitor is strongly preferred, because of the need for familiarity with regional markets. NW-OASIS and PSNC will collect information as required by the monitor, states and FERC, to be held on a confidential basis until disputes arise.

6.b Market Power Mitigation

This option assumes that the market monitor will have the ability to trigger investigations and turn the results over to state Attorneys General, state regulatory agencies, the Federal Trade Commission, and FERC. Market participants can request investigations by the market monitor. Penalties will be imposed by those with the authority to do so. The market monitor will identify situations in which "circuit breakers" could be imposed to deal with load pockets or other attempts to exercise market power. (Circuit breakers would shift the market rules to require individual generators to release supplies to the market under strictly defined conditions, including compensation for costs, designed to deal with conditions likely to support the exercise of market power.) Circuit breakers will be preceded by "early warning systems", which will put market participants on notice that they are being watched and may be fined. Use of the NW-OASIS explicitly will require agreement to abide by the determinations of the market monitor, the NW-OASIS and the PNSC.

Group 7 – "Ballpark" Costs, Benefits and Timing

7.a Expected Costs

This option is expected to be the least cost approach to dealing with immediate transmission problems. Additional costs would be incurred as necessary, and if cost-effective, to address subsequent transmission problems. Additional costs would be incurred initially in the areas of planning (NTAC), access (NW-OASIS), and reliability (PNSC). Eventually, additional costs would be necessary for market monitoring and responding to requests for transmission service. Some savings of existing costs may be possible regarding access, planning, staff re-employment by the new organizations and consolidation of studies required to respond to requests for service.

7.b Benefits (Return on Investment)

Changes are intended to ensure positive benefit/cost ratios for each incremental change, so that consumers benefit from all changes.

7.c Order of Steps

Phase 1 (first year)

- development of umbrella transmission coordination agreement (TCC);
- signatories make payments to cover common costs (except NW-OASIS);
- NW-OASIS costs covered by a scheduling fee;
- PNSC paid directly by control areas;
- continued development of NTAC, including formal relationship with the Northwest Power Pool; NTAC issues first plan;
- establishment of NW-OASIS; agreement on common ATC methodology;
- agreement on new transmission products to be offered through NW-OASIS;
- conforming tariff changes developed and submitted to FERC (e.g., service requests go to NW-OASIS, studies done by NTAC);
- work out details for open season process, including nature of rights awarded to entities funding new construction;
- market monitor established by states;
- determine additional data streams and resources needed by PNSC;
- congestion managed by schedule limits;
- INC/DEC bulletin boards established (energy and ancillary services)

Phase 2 (second year)

- implement open seasons;
- NW-OASIS assumes responsibility for calculating ATC;
- NW-OASIS cooperates with regional market monitor, once established;
- NTAC responds to transmission service requests;
- coordination between PNSC and NW-OASIS on power flow analysis for reliability and commercial purposes;
- PNSC uses information on schedules for next-hour analysis to inform flow-based curtailments;

- expansion of PNSC to meet new obligations;
- NW-OASIS calculates flow-based schedule limits and post-curtailment settlements.

7.d Time to Implement

Option 1 is a continuing effort. Improvements beyond the first two years will be implemented if and when they are determined to be cost-effective.